Chapter 10: Hazardous Materials

A. INTRODUCTION

This chapter presents the findings of the hazardous materials assessment and identifies potential issues of concern with respect to workers, the community, and/or the environment during and following construction of the Lambert Houses project.

The Development Site includes Parcels 1, 3, 5, and 10 of the Bronx Park South Large Scale Residential Development (LSRD) and a small City-owned triangular parcel at the intersection of East Tremont Avenue and Boston Road. The approximately 11.7-acre Development Site contains five groups of six-story buildings containing 731 residential units, and one two-story building containing approximately 39,490 square feet (sf) of retail use and 375 parking spaces. The potential presence of hazardous materials was evaluated based on a July 2015 *Phase I Environmental Site Assessment* (ESA) conducted in accordance with *ASTM Standard E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice* by AKRF, Inc. (AKRF).

As discussed in this chapter, based on the potential hazardous materials concerns identified by the Phase I ESA, the parcels would be mapped with "E" designations on the zoning map for hazardous materials. The "E" designation constitutes an institutional control to require these measures on the privately owned parcels. Phase II investigations would be conducted in accordance with Sampling Protocols that would be pre-approved by New York City Mayor's Office of Environmental Remediation (OER). Based on the results of these investigations, Remedial Action Plans (RAPs) and associated Construction Health and Safety Plans (CHASPs) would be developed and submitted for approval to OER for implementation during the subsurface disturbance associated with construction, to reduce the potential for human or environmental exposure to any identified (by Phase II Investigations) or unexpectedly encountered contamination during and following construction of the proposed project. Each RAP would address requirements for soil stockpiling, soil disposal, and transportation; dust control; vapor control measures (if any); dewatering procedures; quality assurance; and procedures for the closure and removal of any unknown petroleum storage tanks should tanks or contamination be unexpectedly encountered. Each CHASP would identify potential hazards that may be encountered during construction and specify appropriate health and safety measures to be undertaken to ensure that subsurface disturbance is performed in a manner protective of workers, the community, and the environment (such as personal protective equipment, air monitoring including community air monitoring, and emergency response procedures). In addition, demolition of the existing structures would follow applicable regulatory requirements pertaining to asbestos-containing materials (ACM), lead-based paint, polychlorinated biphenyls (PCBs), and chemical disposal. As described in more detail in this chapter, with these measures, the proposed project would not result in any significant adverse impacts related to hazardous materials.

B. EXISTING CONDITIONS

TOPOGRAPHY AND SUBSURFACE CONDITIONS

The Development Site is approximately 30 to 50 feet above mean sea level and slopes down to the northeast. Based upon geotechnical borings, bedrock is expected to be encountered at less than 40 feet below grade. Bedrock outcrops are present on the eastern portion of Parcel 3 (and two blocks southwest of Parcel 10).

The geotechnical boring logs indicate the groundwater table is expected to be encountered at between approximately 9 and 17 feet below grade and was present above bedrock or at the top of rock along East 179th Street, East Tremont Avenue, and along the eastern Development Site boundary. Based on area topography, groundwater likely flows toward the Bronx River, located directly to the east of the Development Site. However, actual groundwater flow and depth may be affected by subsurface openings or obstructions such as basements, underground utilities, or bedrock geology. Groundwater in the Bronx is not used as a source of potable water.

HAZARDOUS MATERIALS ASSESSMENT

PHASE I ENVIRONMENTAL SITE ASSESSMENT

The Phase I ESA included a reconnaissance of the Development Site and the surrounding area in June 2015 and review of a variety of information sources, including recent and historical Sanborn fire insurance maps, environmental regulatory agency databases identifying state and federally listed sites, review of a 2013 Phase I ESA, also completed by AKRF, and geotechnical data compiled during the initial development of the Development Site in the 1970s. The ESA identified the following as recognized environmental conditions (RECs), i.e., indicating the presence or likely presence of hazardous substances or petroleum products in, on, or at a property:

- During the Phase I ESA reconnaissance, a portion of East Parcel 10 was identified as the former Boston Cleaners (a dry cleaner). According to Phipps Houses, Boston Cleaners operated at this location between approximately 1973 and 2014. Drums of suspected spent tetrachloroethylene (PCE) solvent were observed in the rear of their space during the 2013 ESA inspection, which was inaccessible during the 2015 inspection. Boston Cleaners was identified on the federal Air Discharge Facilities (ADF) database for PCE. According to the database, it was listed as in compliance with procedural requirements. The database, however incorrectly lists it as still operating. Boston Cleaners was also identified on the RCRA Generator/Transporter database as a Conditionally Exempt Small Quantity Generator (CESQG) (facility #NYD981182058) for the disposal of F002 – spent halogenated solvents. The most recent listing was for 260 pounds in 2005. Historically, it was both a Large Quantity Generator (LQG) and Small Quantity Generator (SQG) of hazardous waste. The maximum amount disposed of was 2,590 pounds in 1991. The facility was listed with one violation in 1993 for manifest requirements. During the June 2015 reconnaissance, the facility was vacant but the first floor was inaccessible.
- Other historical uses within the Development Site have some potential to have affected subsurface conditions. A portion of Parcel 3 included the Lambert Houses Maintenance facility in 2000. Certificates of Occupancy (COs) indicated an unspecified factory in 1955, vehicle storage and factory loading in 1956, and a dental laboratory in 1958. Uses on Parcel

1 included: an automotive garage in 1901, an art production company in 1956, and a refrigeration company in 2000. COs from 1931 and one with an unidentifiable date for Parcel 1 indicated light manufacturing (including dresses) and a factory in 1955. Uses on Parcel 10 included: Boston Cleaners (discussed above), the Interboro Rapid Transit Company Boston Road Yard, a paint store, and laundry in 1915, a furniture company from 1927 to 1965, a flooring covering company in 1940, LIRR Station Brooklyn in 1940, automotive service stations in 1949 and 1965, Center Empire Train in 2000, and the transit authority in 2005. COs for Parcel 10 indicated manufacturing and ornamental iron works in 1954. Uses on Parcel 5 included: the Metropolitan Dye Works including a Benzine (petroleum distillate) House and a Mat Factory from 1896 to 1977, and the "United Metal Con'd Door and Sash Co. Inc." from 1915 to 1977. COs for Parcel 5 indicated a motor vehicle repair shop in 1949, 1952, 1959, and 1965; manufacturing in 1957; and a furniture and refinishing shop in 1962 and 1965.

- A CO for Parcel 3 noted a fire department approval for a fuel oil tank installation in 1958. A 1955 CO for Parcel 1 noted a fire department permit issued in 1954 for a 550-gallon fuel oil tank installation and a 1958 CO noted approval for a fuel oil installation. New York City Department of Building records for Parcel 10 included an active No. 2 fuel oil boiler registration and a cancelled 1989 No. 2 fuel oil boiler registration. NYCDEP records for Parcel 10 included: a cancelled 1989 No. 2 fuel oil boiler registration for Candy Cleaners; a 2015 No. 2 fuel oil boiler registration for Lambert Houses Redevelopment; a 2005 No. 2 fuel oil boiler registration for Boston Cleaners; a 2005 cancelled No. 2 fuel oil boiler registration for Boston Cleaners; and a 2015 No. 2 fuel oil boiler registration for Lambert Houses. A 550-gallon aboveground storage tank (AST) was identified in the basement of the former Boston Cleaners on Parcel 10.
- The surrounding area was historically mixed-use and included: "Ice Houses"; The Bronx Company Bleaching, Dying, and Printing Works; the New York City Subway; auto repair shops; dry cleaners; and the Tremont Vulcanizing Company.

C. THE FUTURE WITHOUT THE PROPOSED PROJECT

In the future without the proposed project, or No-Action condition, the existing residential and commercial buildings would not be demolished and all other portions of the Development Site would remain undisturbed and undeveloped. Applicable regulatory requirements would need to continue to be followed by the owner/occupants of the Development Site, including but not limited to requirements relating to, disposal of chemicals or other wastes, New York State Department of Environmental Conservation (NYSDEC) regulations relating to closure or removal of petroleum tanks along with any associated contaminated soil, and proper maintenance of ACM and/or lead-based paint.

D. PROBABLE IMPACTS OF THE PROPOSED PROJECT

The future with the proposed project, or With Action condition, would involve a build out period of approximately 13 years. During this period, current tenants would be relocated from buildings to be demolished to other locations within the Lambert Houses. Once relocated, the unoccupied buildings, following removal of ACM in accordance with regulatory requirements, would be demolished and construction of new buildings would proceed (entailing subsurface disturbance). Tenants of the next buildings to be demolished would be relocated within the Lambert Houses Development Site to the newly constructed buildings, and the demolition and new construction

process would continue. An additional 934 affordable residential units and 21,610 sf of retail space would be added. It is also assumed that a new 500-seat public elementary school of approximately 86,608 sf would be built on a portion of Parcel 10.

As noted above, former uses within (and near) the Development Site may have impacted subsurface conditions; and the existing residential and/or former commercial spaces may have used and stored oil for heating purposes and the structures may contain ACM, LBP, and/or PCB-containing materials. Demolition of the existing structures and excavation activities associated with new construction could disturb these hazardous materials and potentially increase pathways for human or environmental exposure. Impacts would be avoided by implementing the following measures:

- An (E) designation [E-393] would be assigned to all parcels of the Development Site to ensure that remedial activities would be undertaken prior to redevelopment. The (E) designation would ensure that appropriate procedures for any necessary subsurface disturbance are followed prior to, during, and following construction.
- ~~Impacts would be avoided through the mapping of an "E" designations for hazardous materials [E-393] on each parcel, and incorporating the following measures into the proposed project~~The text of the (E) designation [E-393] for **Block 3138, Lot 1; Block 3140, Lot 7; Block 3139, Lots 1 and 19; and Block 3132, Lot 1** would be as follows:

TASK 1: SAMPLING PROTOCOL

- **Prior to construction, the Applicant submits to ~~MOER~~OER, for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.**
- **No sampling should begin until written approval of a protocol is received from ~~MOER~~OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum-based contamination and non-petroleum-based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by ~~MOER~~OER upon request.**

TASK 2: REMEDIATION DETERMINATION AND PROTOCOL

- **A written report with findings and a summary of the data must be submitted to ~~MOER~~OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by ~~MOER~~OER if the results indicate that remediation is necessary. If ~~MOER~~OER determines that no remediation is necessary, written notice shall be given by ~~MOER~~OER.**
- **If remediation is indicated from the test results, a proposed remedial action plan (RAP) must be submitted to ~~MOER~~OER for review and approval. The Applicant must complete such remediation as determined necessary by ~~MOER~~OER. The Applicant should then provide proper documentation that the work has been satisfactorily completed.**
- **A ~~MOER~~OER-approved construction health and safety plan (CHASP) would be implemented during evacuation and construction and activities to protect workers and**

the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to ~~MOER~~OER for review and approval prior to implementation."

- The (E) designation cited above would require that ~~To investigate the potential concerns identified by the Phase I ESA,~~ Phase II Subsurface Investigations would be conducted for each phase of demolition/redevelopment, including the collection and laboratory analysis of soil, groundwater, and soil gas samples. Prior to conducting this testing, Sampling Protocols (incorporating a Health and Safety Plan (HASP) to protect workers and the community) identifying proposed sample locations and parameters based on redevelopment plans would be submitted to ~~MOER~~OER for review and approval. Based on the findings of the Phase II Investigations, Remedial Action Plans (RAPs) and associated Construction Health and Safety Plans (CHASPs) would be prepared and submitted to OER for review and approval prior to implementation during project construction). The RAP would address requirements for items including capping with clean fill as a "site cap" in new landscaped/unpaved areas; soil reuse criteria; soil testing, stockpiling, disposal and transportation; dust control; vapor mitigation controls (if any); dewatering procedures; procedures for closure and removal of any petroleum storage tanks; and contingency measures should unexpected contamination be encountered. The CHASP would identify potential hazards that may be encountered during construction and specify appropriate health and safety measures to be undertaken to ensure that subsurface disturbance is performed in a manner protective of workers, the community, and the environment (such as personal protective equipment, air monitoring requirements including community air monitoring, and emergency response procedures).
- Unless information exists to indicate that the existing buildings do not contain asbestos, an asbestos survey would be completed and all ACM would be removed and disposed of prior to demolition, in accordance with applicable regulatory requirements.
- Any demolition activities with the potential to disturb lead-based paint would be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62—Lead Exposure in Construction).
- Unless labeling or laboratory testing data indicated that suspect PCB-containing electrical equipment (including underground transformers) and fluorescent lighting fixtures did not contain PCBs, and that fluorescent lights do not contain mercury, disposal would be performed in accordance with applicable regulatory requirements.
- If not previously completed, any remaining dry cleaning equipment, chemical products, drums, or waste associated with the operations of Boston Cleaners would be properly removed. Decommissioning of equipment and disposal of chemical products and/or any wastes would be completed in accordance with all state and federal regulatory requirements. Boston Cleaners would also be deregistered and removed from the federal Air Discharge Facility database.
- The 550-gallon AST located in the basement of the former Boston Cleaners and any petroleum storage tanks unexpectedly encountered during construction would be properly closed and removed along with any associated contaminated soil in accordance with the OER-approved RAP established for the project and any additional NYSDEC requirements. The tanks would also be registered with NYSDEC and/or the New York City Fire Department (FDNY), if applicable. Any evidence of a petroleum spill would be reported to NYSDEC and addressed in accordance with applicable requirements (as would be outlined in the RAP). In addition, any petroleum storage tanks installed for the new buildings (e.g.,

for emergency generators) would be maintained in accordance with the applicable regulations, including NYSDEC tank maintenance requirements and spill reporting requirements.

- If dewatering is necessary during construction, water would be discharged to sewers, following pre-treatment if necessary, in accordance with DEP requirements.

With these measures, the proposed project would not result in any significant adverse impacts related to hazardous materials. ✷